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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/927,442 | 08/13/2001 | Gen Kanai | Q65835 | 4176 |

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SUGHRUE MION ZINN MACPEAK & SEAS, PLLC
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Washington, DC 20037-3213

EXAMINER

PATTERSON, MARC A

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| ART UNIT | PAPER NUMBER |
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1772

DATE MAILED: 07/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/927,442

Applicant(s)

KANAI ET AL.

Examiner

Marc A Patterson

Art Unit

1772

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 April 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, 31 and 33 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

- 5) ☐ Claim(s) _____ is/are allowed.

- 6) ☒ Claim(s) 1-4, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, 31 and 33 is/are rejected.

- 7) ☐ Claim(s) _____ is/are objected to.

- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6, 7. 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1 – 4, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, 31 and 33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. With regard to Claim 1, the phrase ‘an amount of heat of fusion’ is indefinite as its meaning is unclear, as is the difference between the phrase ‘an amount of heat of fusion’ and the phrase ‘the total amount of heat of fusion.’ Claim 1 recites the limitation "a lower temperature side" in line 17. There is insufficient antecedent basis for this limitation in the claim.

3. Claims 11, 13, 17, 19, 21, 25, 27, and 29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. With regard to Claims 11 and 13, the phrases ‘surface layer’ and ‘interlayer’ are indefinite as the meanings of the phrases are unclear; the claims define only two layers.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 1772

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 3 – 4, 9, 15, 23 and 31 are rejected under 35 U.S.C. 102(b) as being anticipated by Kuroda et al (U.S. Patent No. 5,079,273).

With regard to Claim 1, Kuroda et al disclose a resin composition for heat – shrinkable polypropylene shrink label (for a container; column 2, lines 4 – 13; column 4, lines 35 – 44) which comprises 60% by weight crystalline polypropylene – olefin random copolymer mainly comprising polypropylene (column 3, lines 59 – 68; column 4, lines 1 – 13) and 40% by weight of an alicyclic hydrocarbon resin having a softening temperature of not lower than 110 degrees Celsius (hydrogenated cyclopentadiene; column 3, lines 59 – 68; column 4, lines 1 – 13); the copolymer exhibits a melt flow rate of 0.5 to 10 grams / 10 minutes at 230 degrees Celsius and a load of 2.16 kilograms (column 4, lines 3 – 13; column 12, lines 21 – 23) and a crystal melting point of 120 to 145 degrees Celsius (therefore a fusion peak temperature of between 120 to 145 degrees Celsius as determined by means of a differential scanning calorimeter; column 7, lines 26 – 41).

With regard to Claim 3, the propylene – olefin copolymer is a propylene – ethylene random copolymer (column 2, lines 4 – 13; column 4, lines 35 – 44).

With regard to Claims 4, 9, 23 and 31, the scope of the claims falls within the limitations of Kuroda et al as discussed above. The method of making the copolymer (product – by – process) is given little patentable weight.

With regard to Claim 15, the composition comprises an antiblocking agent (slip agent; column 10, lines 12 – 20).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kuroda et al (U.S. Patent No. 5,079,273).

Kuroda et al disclose a heat – shrinkable composition as discussed above. Kuroda et al fail to disclose a composition having at least one peak of loss tangent measured at a frequency of 1 hertz and a strain of 0.1% in the range from 30 degrees Celsius to 100 degrees Celsius, and a peak value thereof not smaller than 0.10. However, Kuroda et al disclose a softening temperature of the alicyclic component of the composition of not lower than 110 degrees Celsius, as discussed above. Therefore, the softening temperature of the composition, and therefore the number of peaks of loss tangent measured at a frequency of 1 hertz and a strain of 0.1% in the range from 30 degrees Celsius to 100 degrees Celsius, and the peak values, would be readily determined through routine optimization by one having ordinary skill in the art depending on the desired end use of the product. It therefore would be obvious for one of ordinary skill in the art to vary the softening temperature of the composition, and therefore the number of peaks of loss tangent measured at a frequency of 1 hertz and a strain of 0.1% in the range from 30 degrees Celsius to 100 degrees Celsius, and the peak values, since softening temperature of the composition, and therefore the number of peaks of loss tangent measured at a frequency of 1 hertz and a strain of 0.1% in the range from 30 degrees Celsius to 100 degrees Celsius, and the

Art Unit: 1772

peak values, would be readily determined through routine optimization by one having ordinary skill in the art depending on the desired end result as shown by Kuroda et al. *In re Boesch and Slaney*, 205 USPQ 215 (CCPA 1980).

8. Claims 11, 13, 17, 19, 21, 25, 27, 29, 33 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuroda et al (U.S. Patent No. 5,079,273).

Kuroda et al disclose a heat – shrinkable composition as discussed above, comprising a single layer (sheet; column 10, lines 44 – 49 and having a specific gravity of 0.85 grams per cubic centimeter (density; column 3, lines 49 – 58; column 12, lines 30 – 34). With regard to Claims 11, 13, 17, 19, 21, 25, 27, 29, 33 and 35, Kuroda et al fail to disclose a composition comprising at least two layers, and a composition comprising one layer which comprises 1 to 50% of the total film thickness and a composition having a shrinkage rate of less than 3% at 40 degrees Celsius in seven days, and a composition having a shrinkage rate proportional to specific gravity at 80 degrees, 90 degrees and 100 degrees Celsius for ten seconds. However, Kuroda et al disclose a composition having a shrinkage rate of 10% at 100 degrees Celsius (column 11, lines 57 – 63). Therefore, the number of layers (each therefore having at least a fraction of 1% of the total thickness) and the shrinkage rate would be readily determined through routine optimization by one having ordinary skill in the art depending on the desired end use of the product. It therefore would be obvious for one of ordinary skill in the art to vary the number of layers and the shrinkage rate, since the number of layers and the shrinkage rate would be readily determined through routine optimization by one having ordinary skill in the art depending on the

Art Unit: 1772


desired end result as shown by Kuroda et al. *In re Boesch and Slaney*, 205 USPQ 215 (CCPA 1980).

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc Patterson, whose telephone number is (703) 305-3537. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM. If attempts to reach the examiner by phone are unsuccessful, the examiner's supervisor, Harold Pyon, can be reached at (703) 308-4251. FAX communications should be sent to (703) 872-9310. FAXs received after 4 P.M. will not be processed until the following business day.

Marc A. Patterson, PhD.

Marc Patterson
Art Unit 1772


HAROLD PYON
SUPERVISORY PATENT EXAMINER
1772 *6/25/03*